

## COX'S GAS-FLOW COMPUTER.

---

This Computer solves Professor Pole's well-known formula.

$$\text{Discharge in cub. ft. per hour} = c \sqrt{\frac{d^5 \times (p_1 - p_2)}{l \times w}}$$

Where  $d$  = diameter of pipe in inches,

$p_1$  = initial pressure in inches of water,

$p_2$  = terminal pressure in inches of water,

$l$  = length of pipe in yards,

$w$  = specific gravity of the gas when air = 1.

$c$  = a constant varying from 1000 to 1350.

### TO FIND THE DISCHARGE OF GAS.

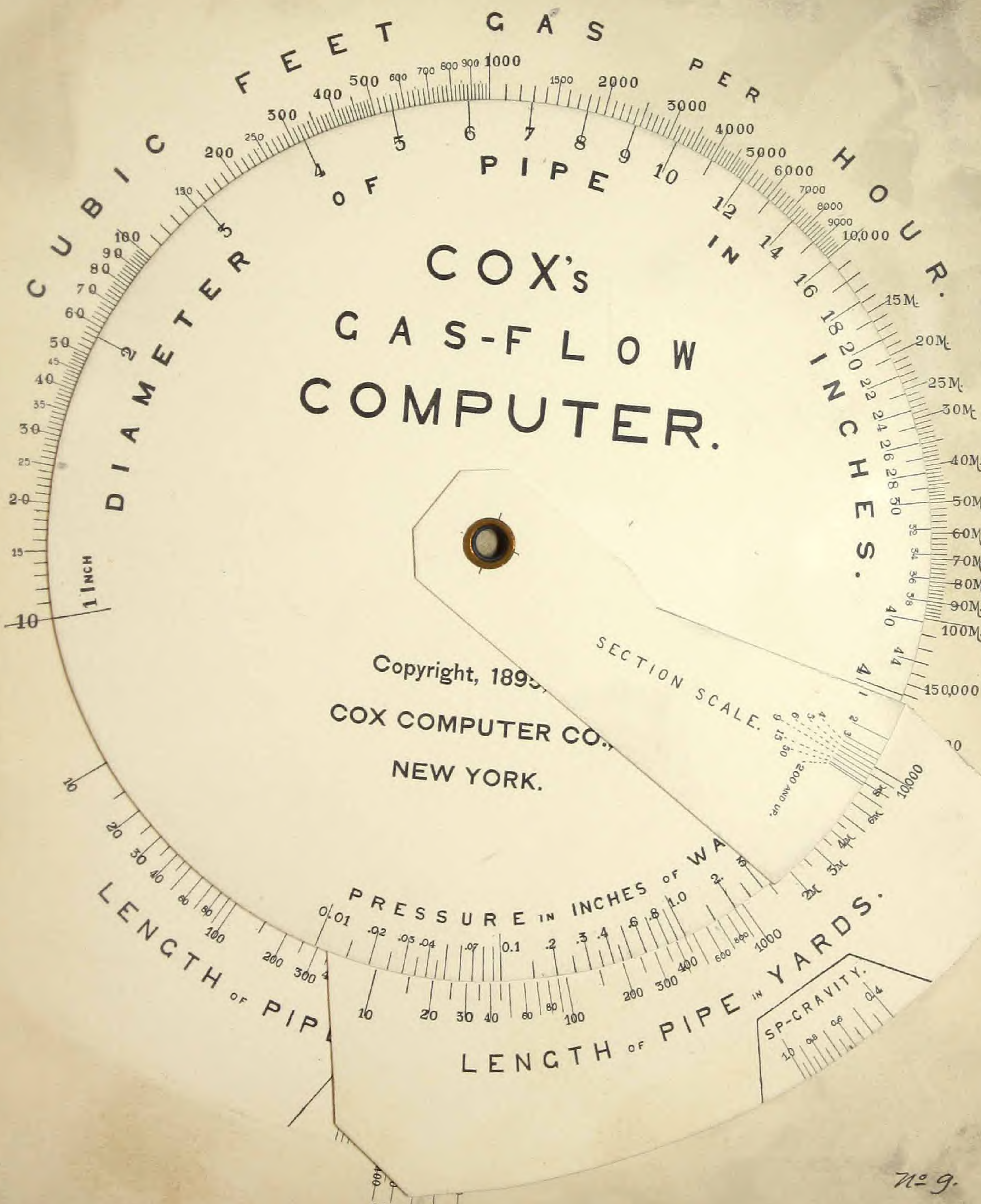
- (1). Set the specific gravity of the gas opposite the selected constant;
- (2). Bring the difference of pressure ( $p_1 - p_2$ ) opposite the given length of pipe;
- (3). Opposite any diameter of pipe will be at once found the discharge in cubic feet per hour; and
- (4). Opposite any desired discharge will also be found the required diameter of the pipe.

### TO FIND THE DIFFERENCE OF PRESSURE.

- (1). Set the specific gravity of the gas opposite the selected constant;
- (2). Bring the diameter of pipe opposite the desired discharge in cubic feet per hour;
- (3). Opposite the given length of pipe find the required difference of pressure between the ends of the pipe.



COX's  
GAS-FLOW  
COMPUTER.



1090-3820 Rev

No 9.